

Remarks

Claims 7 and 13 are amended.

Claims 14-17 are withdrawn per the examiner's previous action.

Claims 7 and 13-17 are pending.

Claims 7 and 13 are under consideration.

Claim 7 is amended to remove the phrase 'C₆-C₂₄-aryl' from the alternate definition of R₅, R₆ and R₇. There is no proper antecedent to the C₆-C₂₄-aryl group within the paragraph defining this alternate definition of R₅, R₆ and R₇.

Claim 7 is further amended to delete the final paragraph of the claim, which describes A₁ and A₂ as a substituted phenyl group in the case of a DPP of formula III.

Claim 13 is amended to delete formulae 1-3, 6, 7 and 10-12.

Claims 13 and 14 have been amended to place in appropriate Markush language.

No new matter is added.

Claim 7 is rejected under 35 USC 112 second paragraph as being indefinite with regards to the 'C₆-C₂₄-aryl' term in the alternate definition of R₅, R₆ and R₇. Reference to this group, which appeared as 'aryl' prior to amendment, is removed. Its inclusion appears to have been due to a transcription error from the description of a similar but unrelated substituent as no proper antecedent can be found within the alternate definition in question.

In light of the amendment, applicants submit that any remaining indefiniteness under 35 USC 112 second paragraph has been addressed and the rejection is overcome.

Claims 7 and 13 are rejected under 35 USC 103(a) as obvious over Jost et.al., U. S. Pat. 4,585,878. Jost generically claims certain compounds of the present invention and teaches that they are fluorescent, column 9, line 30.

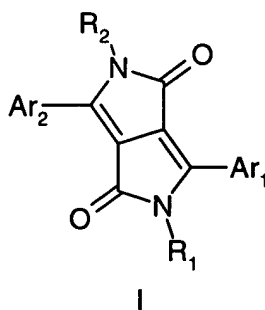
Previously presented data by Applicants demonstrating the surprisingly superior electroluminescence of naphthyl and phenanthryl substituted DPP compounds were also deemed insufficient by the Examiner to demonstrate superior/unexpected results commensurate with the scope of the compounds of claims 7 and 13 for the following reasons:

Jost teaches fluorescence and applicants data relate to electroluminescence, a property not considered by Jost.

The comparisons were not drawn to sufficiently similar compounds.

Claim 13 contained the formulae of several phenyl substituted DPP compounds despite applicants claim of their deficiency relative to naphthyl and phenanthryl substituted DPP.

With the above amendments, claim 13 has been limited to compounds that are substituted at A₁ and A₂ by substituted or unsubstituted naphthyl or phenanthryl. Jost exemplifies neither A₁ and A₂ naphthyl or phenanthryl substituted compounds. While Jost teaches the fluorescence of this class of compounds generically, no superiority in light emission from the naphthyl derivatives can be inferred from a reading of the cited art.



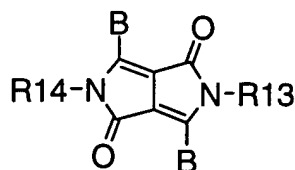
While the Examiner correctly points out that Jost lists naphthyl as a preferred substituent (column 5 paragraph beginning on line 41), there is no suggestion in Jost that there is any difference whatsoever in the benefits of naphthyl over phenyl substituents. Applicants further suggest that any preference for the unexemplified naphthyl derivatives relates to the primary teaching regarding substitution within Jost, namely substituents which do not confer solubility in water (column 1 first paragraph, column 4 last paragraph). In as much as Jost did not prepare the naphthyl DPP

compounds, superiority of any property of naphthyl versus phenyl derivatives, such as fluorescence or electroluminescence, would have been unobservable.

Applicants submit that using electroluminescence data to demonstrate surprising/superior results should not be held as inappropriate simply because Jost could not anticipate such a use. Jost presents no data regarding the compounds of the present invention and fails to point toward their selection for any use.

The Examiner has expressed concern that previously presented data did not compare sufficiently similar compounds. Applicants acknowledge their error in incorrectly assigning the structure of the comparative compound EM 8 from Japanese application number JP A2001-257078 by Toray and request the Examiner consider the corrected information presented herein.

Japanese Appl. No. JP A2001-257078 (Toray) describes the use of DPP compounds in EL devices with particular Ar₁ and Ar₂ substitution. Applicants previously enclosed an English translation of JP '25708. The patent was published September 21, 2001, almost one year after the Applicants filing date and therefore is not prior art. JP '078 discloses data shown below that clearly demonstrate that naphthyl substitution for Ar₁ and Ar₂ is superior to the phenyl substitution as exemplified in Jost.



B = 1-naphthyl

Example	R13 = R14	Compound	λ [nm]	EL [Cd/m ²]	Page of JP '708
1	Benzyl	EM1	558	4920	26
2	4-tBu-benzyl	EM2	560	5330	27
3	1-naphthyl	EM3	564	4900	27
4	Ethyl	EM4	567	5000	28
5	4-methylbenzyl	EM5	556	7240	28

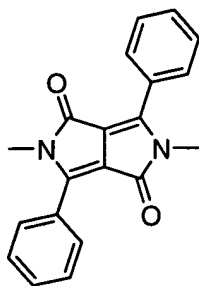
B= phenanthryl

6	4-methylbenzyl	EM6	563	16940	29
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B= phenyl

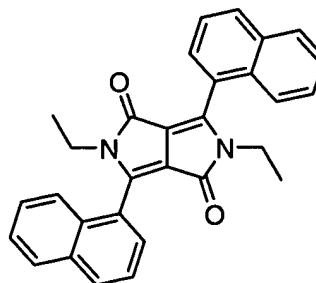
8	methyl	EM8	582	133	30
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Applicants direct the examiner to a comparison of EM 8 with EM 4 shown here.



EM 8

EL [Cd/m²] - 203



EM 4

EL [Cd/m²] - 5,000

The only difference other than the phenyl and naphthyl substituents between the correct structure of EM 8 and EM 4 is the N-methyl of EM 8 versus the N-ethyl of EM 4. As the electroluminescent intensity is unexpectedly and significantly greater in DPP compounds when phenyl is replaced by naphthyl or phenanthryl, applicants aver that the instant invention shows unexpected advantages to those exemplified by Jost.

In light of the amendments and the present discussion, Applicants submit that the 35 USC 103(a) rejections are addressed and are overcome

The Examiner is kindly requested to reconsider and to withdraw the present rejections.

Applicants submit that the present claims are now in condition for allowance and respectfully request that they be found allowable.

Respectfully submitted,

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